



Seismo Info 03/2022



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The FSVO compiles the most important food safety information every month:

[FSVO website](#)

★★★★ very important info ★★★ important info ★ interesting info

Food trends

★★★ **Food supplements:** A study conducted by the German Federal Institute for Risk Assessment (BfR) indicates that a **third of the German population** take **vitamins** through food supplements at least **once per week**, while one in six Germans take them every day. [BfR](#), 2 pages. (10.02.2022).

★★★ **Organic products:** The Swiss Federal Office for Agriculture (FOAG) and the Research Institute of Organic Agriculture (FiBL) have jointly published a report to analyse the **development of the organic foodstuffs market**, as well as consumers' **buyer motivations** and other aspects. [FOAG](#), 3 pages. (01.03.2022).

★★★ **Controlled-environment agriculture:** An article reviews the **four core claims** regarding controlled-environment agriculture: greater **food safety**, increased **freshness** and an improved **nutritional** and **environmental profile**. [FoodSafetyMagazine](#), 3 pages. (01.02.2022).

★★★ **Exotic fruit:** **Exotic and citrus fruits are increasing in popularity** in Switzerland: in 2021, imports of exotic fruits increased by around a third compared to 2010. [FoodAktuell](#), 1 page. (04.02.2022). Original publication: [FOAG](#).

★★★ **Packaging:** A project conducted in Switzerland has evaluated the feasibility of **using chicken feather meal** to develop high value added **polymer products**, including packaging. [Innosquare](#), 1 page. (2022). A study conducted by American scientists outlines a key advance in turning **apple waste** into a **packaging material** that could serve as an alternative to plastic. [EurekAlert!](#), 2 pages. (14.02.2022). Original publication: [OregonStateUni](#). A study has revealed **support for edible packaging** across multiple regions around the world, including India, China and Brazil. [NewFoodMagazine](#), 2 pages. (17.02.2022).

★★★ **Sugar:** EFSA's scientists have completed their comprehensive **safety assessment of sugars in the diet** and their **potential links to health problems**. The authors conclude that intakes of added and free sugars should be **as low as possible** as part of a nutritionally adequate diet. [EFSA](#), 3 pages. (28.02.2022).

★ **Eating habits:** Nearly nine in ten consumers **snack daily**, but according to new research, what they reach for and when has **evolved significantly during the pandemic**. [FoodNavigator](#), 2 pages. (24.02.2022). A publication analyses the **changes in food-related interests** across 18 countries in 2020, during the **SARS-CoV-2** pandemic, based on Google search volumes. [Nature](#), 14 pages. (28.02.2022).

★ **Food colouring and preservatives:** An article explores **market opportunities** and **recent developments** in the food preservatives industry. One **trend** that has been identified is the increased use of **natural preservatives** derived from plants and animal sources, in place of the synthetic equivalents used up to now. [OpenPR](#), 2 pages. (22.02.2022). An article reviews the possibilities and potential **future evolution** in the **natural food colourants and preservatives** industry. In this context, the article suggests that new, safer and more efficient natural additives with **dual functionality** (colorant and preservative) will be developed. [JAgricFoodChem](#), 17 pages. (21.02.2022).

Unusual outbreaks

★★★★ **E. coli:** In Canada, an **outbreak of E. coli O103** has been associated with **minced celery**. This is the first time that an outbreak of a strain of *E. coli* other than *E. coli* O157 has been associated with celery. [CDDR](#), 5 pages. (01.2022).

Food safety

★★★★ **Vibrio parahaemolyticus:** Researchers in Australia have called for **an increased focus** on infections of *Vibrio parahaemolyticus* in the country due, among other things, to the **potential impact of climate change**. The scientists are requesting a national discussion to consider *Vibrio parahaemolyticus* infection as a **nationally notifiable disease**. [FoodSafetyNews](#), 2 pages. (24.02.2022). A laboratory based study has produced **promising results** regarding the application of **lytic bacteriophages** to control *Vibrio parahaemolyticus*. These results could be scaled up for large-scale application in the **food industry**. [JVerbrauchLebensm](#), 9 pages. (04.01.2022).

★★★★ **Salmonellae:** A study has shown that stressors on **dried fruit** can induce the **viable-but-nonculturable state** in salmonellae, thus rendering the pathogen **undetectable** using culture-based methods. The authors recommend using **microscopic and molecular methods** alongside culture-based detection methods. [ApplEnvironMicrob](#), 13 pages. (01.2022).

★★★★ **E. coli:** Authorities in France are investigating an **increase** in the number of cases of **Haemolytic uraemic syndrome (HUS)** and cases of **severe E. coli infections** reported since the beginning of February. Thirteen apparently linked cases of SHU have occurred in five regions across France. No information has been released regarding the suspected strains of *E. coli* or the sources of the infection. [FoodSafetyNews](#), 2 pages. (01.03.2022). Original publication: [Santé.gouv.fr](#).

★★★ **Microplastics:** An article explores the **potential dangers** of microplastics, how food becomes **contaminated** with them and ways to **reduce exposure**. [MedicalNewsToday](#), 4 pages. (18.02.2022).

★★ **Warnings, recalls and alerts:** The Federal Food Safety and Veterinary Office (FSVO) has published its annual report on its **public warnings, recalls** and the **RASFF** rapid alert system. The FSVO published a total of 31 public warnings and 62 recalls in 2020. The number of **RASFF alerts** issued by Switzerland **increased slightly**, while the number of alerts involving Switzerland **rose considerably** from 201 in 2019 to 241 in 2020. [FSVO](#), 22 pages. (25.01.2022).

★★ **Hepatitis E:** German researchers have studied the **stability of the hepatitis E virus (VHE)** on different **surfaces** (wood, plastic, ceramics and steel). The researchers concluded that VHE shows a **high stability** against drying and subsequent storage on different surfaces. [FoodEnvironViro](#), 11 pages. (27.01.2022).

★★ **Plastic bottles:** Researchers have found **several hundred different chemical substances** in tap water **stored in reusable plastic bottles**. Several of these substances are potentially harmful to human health. [Science-Daily](#), 3 pages. (11.02.2022). Original publication: [JHazardMater](#).

★★ **Lead:** An American company is recalling its **dried plum-based snacks** due to them being found to contain **increased levels of lead**. [FoodPoisonJournal](#), 2 page. (16.02.2022). Original publication: [FDA](#).

Food fraud

★★★ **Olive oil:** A study conducted in Switzerland has uncovered **large-scale food fraud** in the composition of extra virgin **olive oils**. [RTS](#), 2 pages. (03.02.2022).

★★★ **Champagne:** One person has died and a number of people have fallen sick in Germany and the Netherlands after drinking **champagne contaminated with ecstasy**. The champagne was bought via an **online platform** some time before it was served. [FoodSafetyNews](#), 2 pages. (26.02.2022). More information: [BVL](#).

★★ **Honey:** The UK Government's team of chemists has published two scientific papers highlighting the **increasing complexity** of **honey authentication**. [LGC](#), 1 page. (08.02.2022). Original publications: [Nature](#); [Nature](#).

★★ **Baby food:** A new study has found that an average of **nine promotional claims** are printed on the packaging of baby food products in the UK. These claims are largely **unregulated** and often imply some form of indirect health benefit. [NewFoodMagazine](#), 2 pages. (02.03.2022). Original publication: [BMJ](#).

★ **Mineral oils:** A non-governmental organisation that focusses on consumer protection has had different **industrial food waste** analysed for mineral oils. **One in every eight** of the 152 products from various European countries analysed in 2021 was found to be contaminated. [foodwatch](#), 2 pages. (23.02.2022).

Close up

★★★ **Cancer:** Researchers have investigated the mechanisms behind **immunosuppression** and **pancreatic tumour growth** in the pancreatic cells of mice and humans. They found that the presence of **Lactobacillus** in the **gut microbiome** inhibits the immune cells that would otherwise stop or slow the growth of pancreatic cancer, **thus promoting tumour growth**. [MedNewsToday](#), 3 pages. (23.02.2022). Original publication: [Immunity](#).

★★★ **Endocrine Disruptors:** Researchers have developed an approach to **more rigorously assess** the impacts of exposure to **mixed endocrine-disrupting chemicals** on the **endocrine system**. The researchers found that the exposure of **expectant mothers** to mixed endocrine-disrupting chemicals may be associated with **language delay** in their children. [EurekAlert!](#), 1 page. (17.02.2022). Original publication: [Science](#).

★★★ **Metals:** Researchers have studied how **prenatal exposure to mixtures of commonly found metals** (antimony, cadmium, cobalt, mercury, molybdenum, nickel and tin) can **adversely affect foetal growth**. The findings suggest that antimony, a lesser studied metal, can have a negative impact on foetal development. [EurekAlert!](#), 2 pages. (10.02.2022). Original publication: [EnvironInt](#).

★★★ **Hepatitis E:** Many common **hand disinfectants** do not inactivate the **hepatitis E virus**, according to a recent study. Of the five hand disinfectants tested, only one, which contained phosphoric acid as well as alcohol, neutralised all virus particles. [FoodSafetyNews](#), 2 pages. (04.02.2022). Original publication: [JHepatol](#).

★★★ **Multiple sclerosis:** It has been found that **milk** may **exacerbate the symptoms** of multiple sclerosis. German researchers have injected **casein** (a constituent protein of cow's milk) into mice, which went on to develop **neurological disorders**. Electron microscopy showed damage to the insulating layer around the nerve fibres, known as the myelin. [EurekAlert!](#), 3 pages. (01.03.2022). More information: [UniBonn](#).

★★ **Alcohol:** A team of researchers has demonstrated that **prenatal exposure to alcohol** in **expectant fathers** can manifest **in the placenta** of their children. This new research suggests that science should be looking more closely at the fathers' prenatal behaviour. [ScienceDaily](#), 2 pages. (01.02.2022). Original publication: [TheFASEBJ](#).

★★ **Shellfish:** Japanese researchers have discovered a **new type of micro-organism** that parasitises and **eliminates plankton** and which causes "**shellfish poisoning**", a condition that induces numbness and dyspnea when eating shellfish. [TellerReport](#), 3 pages. (19.02.2022).

★★ **Epidemiology:** Original publication: [ScAdv](#). A study on the presence of **SARS-CoV-2** in **wastewater** highlights the potential of such systems for detecting microorganisms currently circulating in the population, as a form of **early warning system** for detecting new pathogenic viruses and bacteria. [KantonsLaborBS](#), 3 pages. (07.02.2022).

★ **Water:** An extensive international study has revealed that many rivers have been **polluted by pharmaceutical products**. More than a quarter of the sites included in the study, several of which are in Switzerland, were found to contain pharmaceuticals in concentrations **potentially hazardous** to humans and the environment. [rts](#), 2 pages. (17.02.2022). Original publication: [PNAS](#). Current **water quality** guidelines do not protect freshwater ecosystems against **increasing levels of salt pollution** caused by gritting, agricultural fertilisers and mining, a new international study has found. [NatureWorldNews](#), 2 pages. (21.02.2022).

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